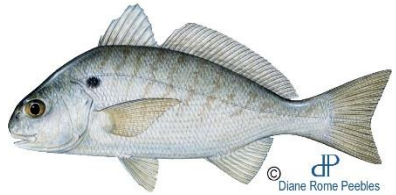
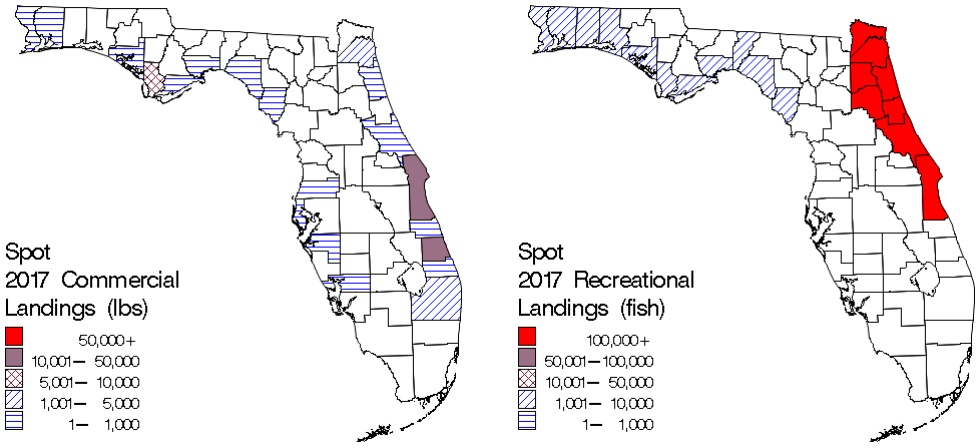
Spot, *Leiostomus xanthurus* (Lacepède, 1802)



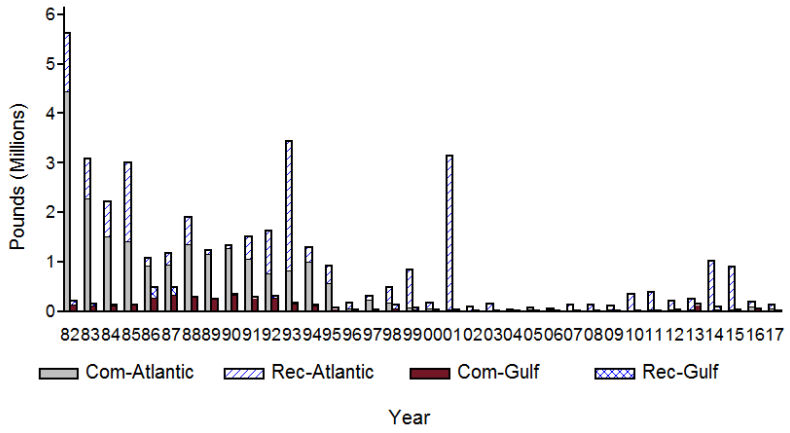
Life History

Spot occur from the Gulf of Maine to the Bay of Campeche, Mexico, and inhabit estuarine and coastal waters to depths of at least 670 feet. In Florida, spot are found in all coastal waters except those off the extreme tip of Southeast Florida and the outermost Keys. Juvenile spot enter bays during the winter and early spring and remain there until late fall. Spot grow to about 5.9 inches total length (TL) at age 1, 8.7 inches TL at age 2, and 11 inches TL at age 3. Maximum age is 6 years (ASMFC 2010). During the fall, they migrate offshore to spawn or to escape low water temperatures. Spot mature at 1 or 2 years of age. Spawning occurs from December through March off Florida (Springer and Woodburn 1960). Juvenile spot feed mainly on crustaceans, molluscs, nematodes, and polychaetes (Livingston 1984). The diet of adult spot includes polychaetes, amphipods, bivalve and gastropod molluscs, small crustaceans such as mysids, copepods, and detritus (Koblinsky and Sheridan 1979; Hales and Van Den Avyle 1989).

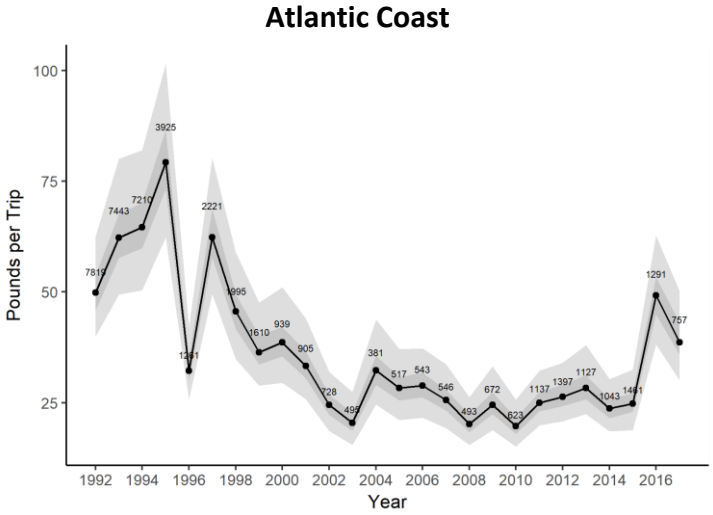
2017 Spot Landings by Sector

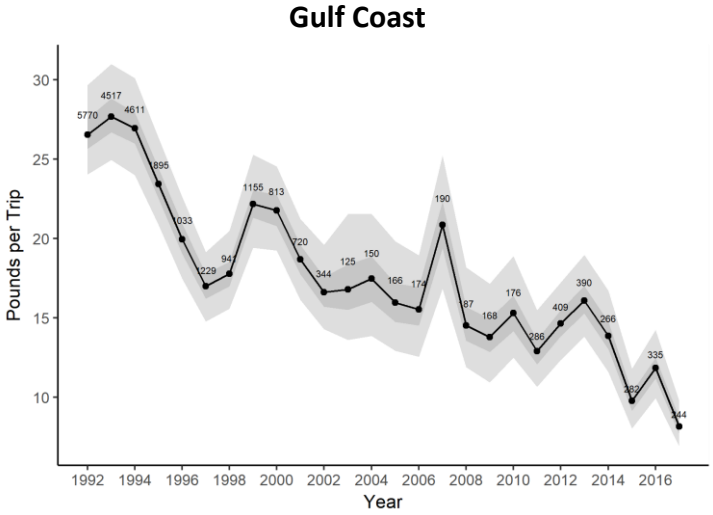


Total Annual Landings (lbs.) by Coast (1982-2017)

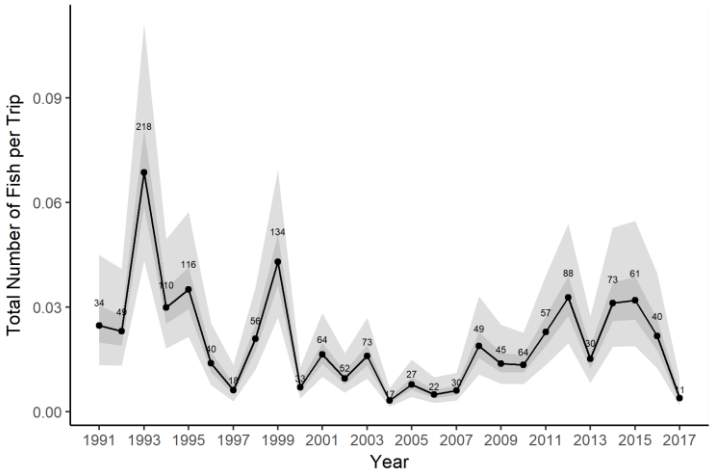


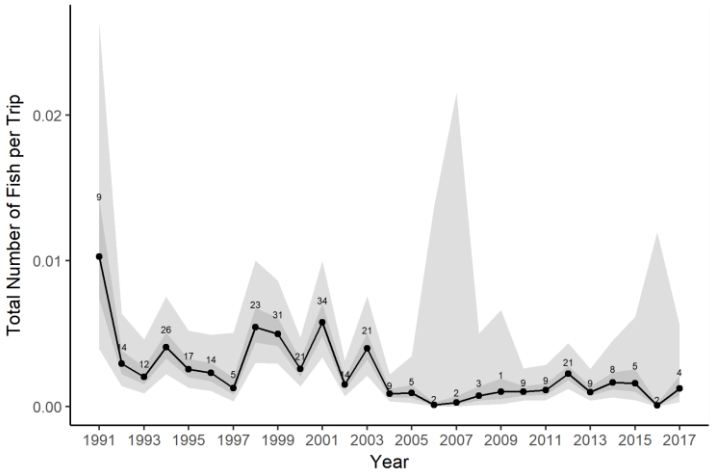
Fishers landed 135,812 pounds in 2017 which were 76.4% lower than the previous 5-year average (2012-2016). Coastwide, 91% of these were from the Atlantic and 9% were from the Gulf. Recreational and commercial landings constituted 56.7% and 43.3%, respectively, of the total landings.



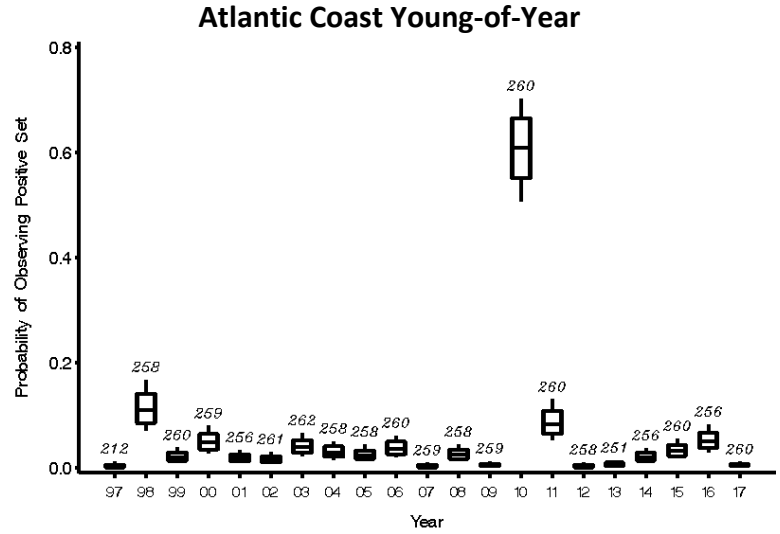


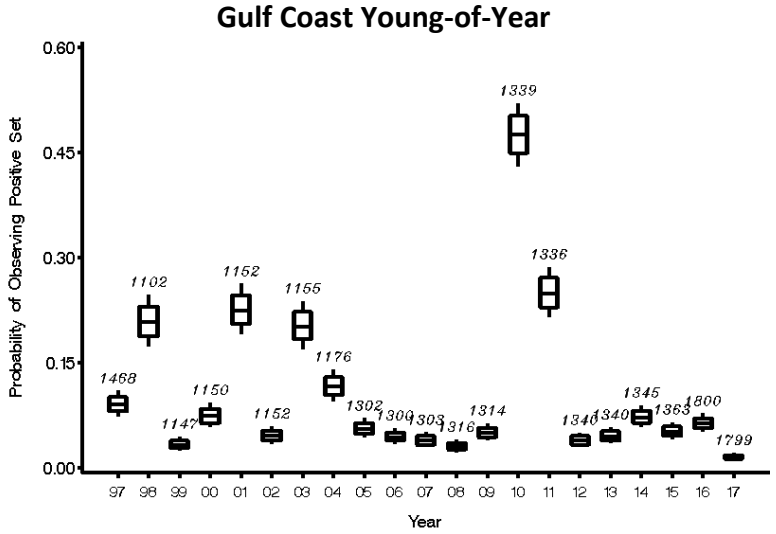
Standardized Commercial Catch Rates: Commercial landings per trip on the Atlantic declined steadily from 1997-2003, increased modestly in 2004 but remained stable through 2015 and increased within the past two years. Gulf coast landings rates generally show a slow long-term decline along the time series. Dark grey ribbons represent first and third quartiles while the light grey ribbons represent the 2.5% – 97.5% quantiles.

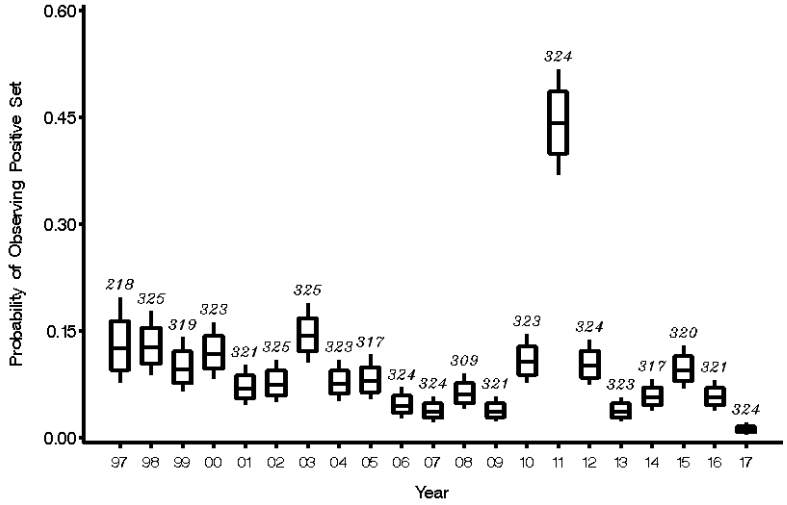


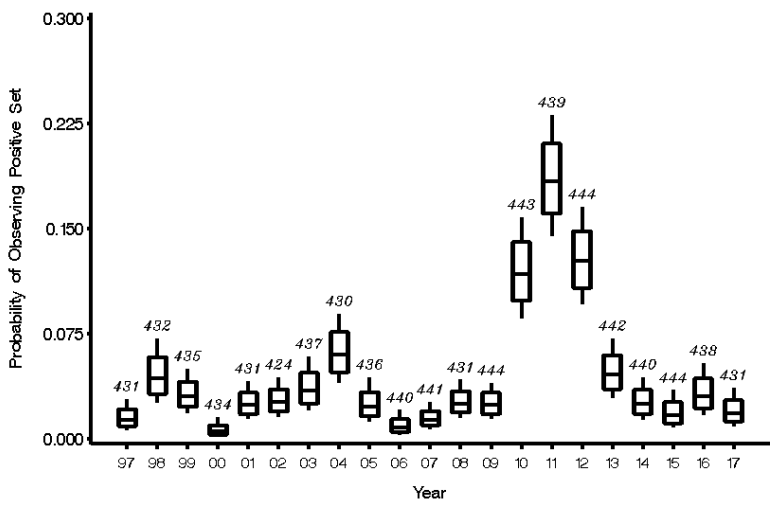


Standardized Recreational Total Catch Rates: Total catch rates of recreational anglers fishing for spot are highly variable and imprecise. These show no significant trends on either the Atlantic or Gulf coasts during 1991–2015. Dark grey ribbons represent first and third quartiles while the light grey ribbons represent the 2.5% – 97.5% quantiles.



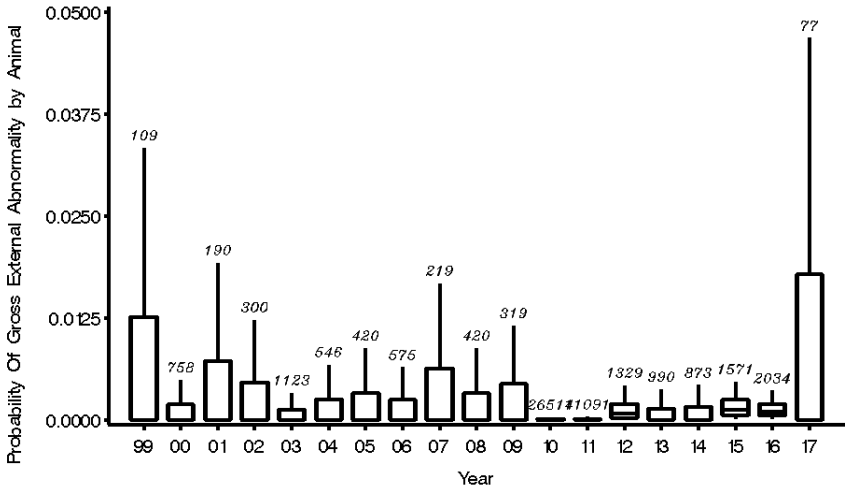






Fishery-Independent Monitoring: Indices of abundance for young-of-the-year (YOY) spot varied without trend on the Atlantic coast, but strong year classes are evident in 1998 and 2010-2011. On the Gulf coast YOY abundances varied erratically and without trend with strong year classes in 1998, 2001, 2003, and 2010-2011. Post-YOY spot abundance indices on the Atlantic coast steadily decline from 1997 through 2009 with a steep increase in 2011, followed by a decline to low levels in 2012-2017 On the Gulf coast the post-YOY indices of abundance appear to follow a cyclical pattern with highs in 1998, 2004, and a notable high in 2010-2012.

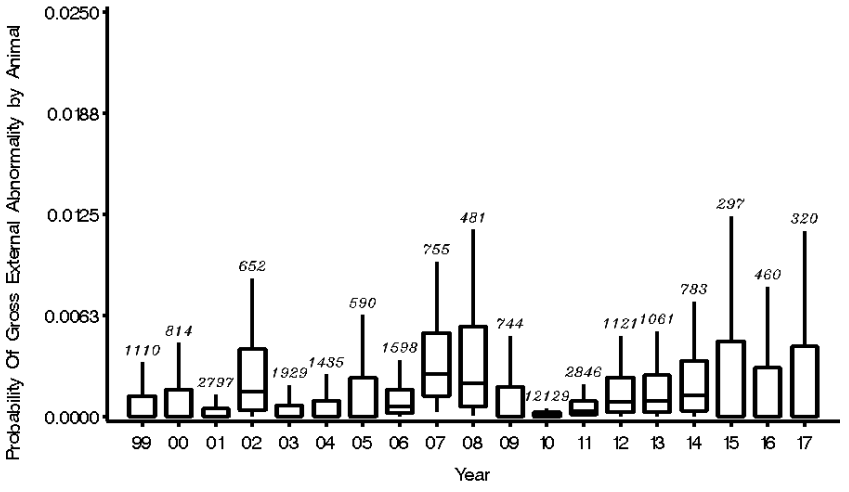
Atlantic Coast Proportion to Total Collected



Atlantic Coast Percentage of Abnormality Types

No Data Available

Gulf Coast Proportion to Total Collected



Gulf Coast Percentage of Abnormality Types

No Data Available

Fish Health: Gross external abnormalities were reported to be very low on the Atlantic coast apart from peaks in 2012, 2015, and 2016. On the Gulf coast, the prevalence of abnormalities generally fluctuated without trend with peaks in 2002, and 2007-2008.

Stock Status

Current Condition: The status of the Atlantic stock is not well known but a 2017 Spot Benchmark Assessment suggested that spawning biomass was increasing and that immediate management actions are not necessary (ASMFC 2017).

Management History: On the Atlantic coast, spot are managed under a fisheries management plan developed by the Atlantic States Marine Fisheries Commission (ASMFC). A 2017 Spot Benchmark Stock Assessment and Peer Review Report recommended continued use of the annual traffic light analysis (TLA), established in 2014 to monitor fishery and resource trends, and implement management measures as needed, for spot . The TLA approach is used for data limited fisheries to allow for at least a minimum level of resource management.

Figure Reference: ASMFC 2017 Stock Assessment Report and available here: http://www.asmfc.org/species/spot